

STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING **ERROR REPORT**

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Application Serial Number: 10/642,272B
Source: 1FCW/6
Date Processed by STIC: 02/13/2007

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**FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT
MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221**

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. **EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>), EFS Submission User Manual - ePAVE)**
2. **U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450**
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Revised 01/10/06



IFW16

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/642,272B

DATE: 02/13/2007
TIME: 10:09:49

Input Set : F:\Sequence Listing (Substitute) (58777.12).txt
Output Set: N:\CRF4\02132007\J642272B.raw

3 <110> APPLICANT: Hattori, Fumiuki
4 Sugimura, Keijiro
5 Furuya, Mayumi
7 <120> TITLE OF INVENTION: Therapeutic Methods and Agents for Diseases Associated with
8 Decreased Expression of AOP-1 Gene or AOP-1
10 <130> FILE REFERENCE: 58777.000012
12 <140> CURRENT APPLICATION NUMBER: 10/642,272B
13 <141> CURRENT FILING DATE: 2003-08-18
15 <150> PRIOR APPLICATION NUMBER: PCT/JP02/01358
16 <151> PRIOR FILING DATE: 2001-02-18
18 <150> PRIOR APPLICATION NUMBER: JP 41003/2001
19 <151> PRIOR FILING DATE: 2001-02-16
21 <160> NUMBER OF SEQ ID NOS: 32
23 <170> SOFTWARE: PatentIn version 3.3
25 <210> SEQ ID NO: 1
26 <211> LENGTH: 1542
27 <212> TYPE: DNA
28 <213> ORGANISM: Homo sapiens
30 <400> SEQUENCE: 1

31 ctgaagatgg cggctgtgt aggacggttg ctccgagcgt cggttgcgg acatgtgagt 60
33 gccattcctt gggcatttc tgccactgca gcccctaggc ctgctgcatt tggaagaacg 120
35 agcttgacaa atttattgtg ttctgggtcc agtcaagcaa aattattcag caccaggccc 180
37 tcatgccatg cacctgtgt caccctggcat gcaccctatt ttaagggtac agccgttgc 240
39 aatggagagt tcaaagaccc aaggccttgat gacttttaagg gaaatattt ggtgttttc 300
41 ttctatcctt tggatttcac ctttgtgtgt cctacagaaa ttgttgcatt tagtgacaaa 360
43 gctaacgaat ttcacgtgtt gaactgtgaa gttgtcgac tctcagtggaa ttccacttt 420
45 agccatcttg cctggataaa tacaccaaga aagaatggtg gtttgggcca catgaacatc 480
47 gcacfccttgtt cagacttaac taagcagatt tcccgagact acgggtgtgt gttagaaggt 540
49 tctggtcttg cactaagagg tctcttcata attgacccca atggagtcat caagcatttg 600
51 agcgtcaacg atctcccaagt gggccgaaggc gtggaaagaaa ccctccgctt ggtgaaggcg 660
53 ttccagttatg tagaaacaca tggagaagtc tgcccagcga actggacacc ggattctcct 720
55 acgatcaagc caagtcacgc tgcttccaaa gagtacttca agaaggtaaa tcagtagatc 780
57 acccatgtgt atctgcaccc tctcaactga gagaagaacc acagttgaaa cctgtttta 840
59 tcattttcaa gatggttatt ttagaaaggc aaggaacca ttatgttgcattt attcataagt 900
61 attactctaa atgttttgcattttt tttgttaattc tggctaggac cttttaaaca tggtagttg 960
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65 cataatttgc ctctatagaa ggctattctt agatcatgtc tcaatggaaa cactttctt 1080
67 tcttagcctt acttgaatct tgcctataat aaagtagagc aacacacatt gaaagcttct 1140
69 gatcaacggc cctgaaattt tcatttgaa tgtcttgcattt taaaactgaa ttttcttta 1200
71 agctaacaaa gatcataatt tcaatgtt gatccgtttaa ctcctgcaat gaatgtttat 1260
73 gtgattgaag caaatgtgaa tcgttattt ttaaaaatgtt gcaagatgttac ttaactgtt 1320
75 atgcattgtt cctcatccctt gaaattgtt gatccgttcaatgtt ttttactta ttttattcat 1380
77 tagctaaattt tggatgtt tatttcttgcattt ttttattcat tataaaggat 1440

*Does Not Comply
Corrected Diskette Needed
(P&R-6)*

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171 caacagcttc caaagagtac tttgagaagg tccatcagta gccatccta tgtctgcaat 840
 173 tacctgaagc tttcaggcc aaaaaagagc cccagctgga atccttccaa tgccttgaag 900
 175 attatttata gaatgcaaa acctcattat gtttgcgttt ataagtactg ctccacaggc 960
 177 ttgttaattc taagacaggt tcaggctctc taaaggtggc tagctgcttc catagctgcc 1020
 179 cttaacttaggg acttcttggg ggctaaccaa ttctcccgaa gtgccttgc cccatttctt 1080
 181 ggatcatgtc cttagagggt aagcattctt tcccttagcc tgccctgaac cttggctac 1140
 183 agtgaagtag cacatagtgc cagtagttgg taaaatgaag tagcacatag caccagca 1200
 185 taatggaagc ttctgatcaa ggtcctaaaa ttctcttgc aattttgtg aattatgctg 1260
 187 aatttccctt tttttttt taaacagtgt cttgtgtgt tctgaggat tgaagaggt 1320
 189 taatcatgaa ggactatgtc taatccataa gtcattttct tcaagagctg gatatataga 1380
 191 at 1382
 194 <210> SEQ ID NO: 4
 195 <211> LENGTH: 256
 196 <212> TYPE: PRT
 197 <213> ORGANISM: Homo sapiens
 199 <400> SEQUENCE: 4
 201 Met Ala Ala Ala Val Gly Arg Leu Leu Arg Ala Ser Val Ala Arg His
 202 1 5 10 15
 205 Val Ser Ala Ile Pro Trp Gly Ile Ser Ala Thr Ala Ala Leu Arg Pro
 206 20 25 30
 209 Ala Ala Cys Gly Arg Thr Ser Leu Thr Asn Leu Leu Cys Ser Gly Ser
 210 35 40 45
 213 Ser Gln Ala Lys Leu Phe Ser Thr Ser Ser Ser Cys His Ala Pro Ala
 214 50 55 60
 217 Val Thr Gln His Ala Pro Tyr Phe Lys Gly Thr Ala Val Val Asn Gly
 218 65 70 75 80
 221 Glu Phe Lys Asp Leu Ser Leu Asp Asp Phe Lys Gly Lys Tyr Leu Val
 222 85 90 95
 225 Leu Phe Phe Tyr Pro Leu Asp Phe Thr Phe Val Cys Pro Thr Glu Ile
 226 100 105 110
 229 Val Ala Phe Ser Asp Lys Ala Asn Glu Phe His Asp Val Asn Cys Glu
 230 115 120 125
 233 Val Val Ala Val Ser Val Asp Ser His Phe Ser His Leu Ala Trp Ile
 234 130 135 140
 237 Asn Thr Pro Arg Lys Asn Gly Leu Gly His Met Asn Ile Ala Leu
 238 145 150 155 160
 241 Leu Ser Asp Leu Thr Lys Gln Ile Ser Arg Asp Tyr Gly Val Leu Leu
 242 165 170 175
 245 Glu Gly Ser Gly Leu Ala Leu Arg Gly Leu Phe Ile Ile Asp Pro Asn
 246 180 185 190
 249 Gly Val Ile Lys His Leu Ser Val Asn Asp Leu Pro Val Gly Arg Ser
 250 195 200 205
 253 Val Glu Glu Thr Leu Arg Leu Val Lys Ala Phe Gln Tyr Val Glu Thr
 254 210 215 220
 257 His Gly Glu Val Cys Pro Ala Asn Trp Thr Pro Asp Ser Pro Thr Ile
 258 225 230 235 240
 261 Lys Pro Ser Pro Ala Ala Ser Lys Glu Tyr Phe Gln Lys Val Asn Gln
 262 245 250 255
 265 <210> SEQ ID NO: 5

RAW SEQUENCE LISTING

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Input Set : F:\Sequence Listing (Substitute) (58777.12).txt
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266 <211> LENGTH: 257
267 <212> TYPE: PRT
268 <213> ORGANISM: Rattus norvegicus
270 <400> SEQUENCE: 5
272 Met Ala Ala Ala Ala Gly Arg Leu Leu Trp Ser Ser Val Ala Arg Pro
273 1 5 10 15
276 Ala Ser Thr Ile Phe Arg Ser Ile Ser Ala Ser Thr Val Leu Arg Pro
277 20 25 30
280 Val Ala Ser Arg Arg Thr Cys Leu Thr Asp Met Leu Trp Ser Ala Cys
281 35 40 45
284 Pro Gln Ala Lys Phe Ala Phe Ser Thr Ser Ser Phe His Thr Pro
285 50 55 60
288 Ala Val Thr Gln His Ala Pro His Phe Lys Gly Thr Ala Val Val Asn
289 65 70 75 80
292 Gly Glu Phe Lys Glu Leu Ser Leu Asp Asp Phe Lys Gly Lys Tyr Leu
293 85 90 95
296 Val Leu Phe Phe Tyr Pro Leu Asp Phe Thr Phe Val Cys Pro Thr Glu
297 100 105 110
300 Ile Val Ala Phe Ser Asp Lys Ala Asn Glu Phe His Asp Val Asn Cys
301 115 120 125
304 Glu Val Val Ala Val Ser Val Asp Ser His Phe Ser His Leu Ala Trp
305 130 135 140
308 Ile Asn Thr Pro Arg Lys Asn Gly Gly Leu Gly His Met Asn Ile Thr
309 145 150 155 160
312 Leu Leu Ser Asp Leu Thr Lys Gln Ile Ser Arg Asp Tyr Gly Val Leu
313 165 170 175
316 Leu Glu Ser Ala Gly Ile Ala Leu Arg Gly Leu Phe Ile Ile Asp Pro
317 180 185 190
320 Asn Gly Val Ile Lys His Leu Ser Val Asn Asp Leu Pro Val Gly Arg
321 195 200 205
324 Ser Val Glu Glu Pro Leu Arg Leu Val Lys Ala Phe Gln Phe Val Glu
325 210 215 220
328 Thr His Gly Glu Val Cys Pro Pro Asn Trp Thr Pro Glu Ser Pro Thr
329 225 230 235 240
332 Ile Lys Pro Ser Pro Thr Ala Ser Lys Glu Tyr Phe Glu Lys Val His
333 245 250 255
336 Gln
340 <210> SEQ ID NO: 6
341 <211> LENGTH: 257
342 <212> TYPE: PRT
343 <213> ORGANISM: Mus sp.
345 <400> SEQUENCE: 6
347 Met Ala Ala Ala Ala Gly Arg Leu Leu Trp Ser Ser Val Ala Arg His
348 1 5 10 15
351 Ala Ser Ala Ile Ser Arg Ser Ile Ser Ala Ser Thr Val Leu Arg Pro
352 20 25 30
355 Val Ala Ser Arg Arg Thr Cys Leu Thr Asp Ile Leu Trp Ser Ala Ser
356 35 40 45
359 Ala Gln Gly Lys Ser Ala Phe Ser Thr Ser Ser Phe His Thr Pro

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 PATENT APPLICATION: US/10/642,272B TIME: 10:09:49

Input Set : F:\Sequence Listing (Substitute) (58777.12).txt
 Output Set: N:\CRF4\02132007\J642272B.raw

360 50 55 60
 363 Ala Val Thr Gln His Ala Pro Tyr Phe Lys Gly Thr Ala Val Val Asn
 364 65 70 75 80
 367 Gly Glu Phe Lys Glu Leu Ser Leu Asp Asp Phe Lys Gly Lys Tyr Leu
 368 85 90 95
 371 Val Leu Phe Phe Tyr Pro Leu Asp Phe Thr Phe Val Cys Pro Thr Glu
 372 100 105 110
 375 Ile Val Ala Phe Ser Asp Lys Ala Asn Glu Phe His Asp Val Asn Cys
 376 115 120 125
 379 Glu Val Val Ala Val Ser Val Asp Ser His Phe Ser His Leu Ala Trp
 380 130 135 140
 383 Ile Asn Thr Pro Arg Lys Asn Gly Gly Leu Gly His Met Asn Ile Thr
 384 145 150 155 160
 387 Leu Leu Ser Asp Ile Thr Lys Gln Ile Ser Arg Asp Tyr Gly Val Leu
 388 165 170 175
 391 Leu Glu Ser Ala Gly Ile Ala Leu Arg Gly Leu Phe Ile Ile Asp Pro
 392 180 185 190
 395 Asn Gly Val Val Lys His Leu Ser Val Asn Asp Leu Pro Val Gly Arg
 396 195 200 205
 399 Ser Val Glu Glu Thr Leu Arg Leu Val Lys Ala Phe Gln Phe Val Glu
 400 210 215 220
 403 Thr His Gly Glu Val Cys Pro Ala Asn Trp Thr Pro Glu Ser Pro Thr
 404 225 230 235 240
 407 Ile Lys Pro Ser Pro Thr Ala Ser Lys Glu Tyr Phe Glu Lys Val His
 408 245 250 255
 411 Gln
 415 <210> SEQ ID NO: 7
 416 <211> LENGTH: 21
 417 <212> TYPE: DNA
 418 <213> ORGANISM: Artificial Sequence
 420 <220> FEATURE:
 421 <223> OTHER INFORMATION: Forward Primer
 423 <400> SEQUENCE: 7
 424 tgcagtttca gtggattccc a 21
 427 <210> SEQ ID NO: 8
 428 <211> LENGTH: 18
 429 <212> TYPE: DNA
 430 <213> ORGANISM: Artificial Sequence
 432 <220> FEATURE:
 433 <223> OTHER INFORMATION: Reverse Primer
 435 <400> SEQUENCE: 8
 436 ttcatgtggc ccaaacca 18
 439 <210> SEQ ID NO: 9
 440 <211> LENGTH: 28
 441 <212> TYPE: DNA
 442 <213> ORGANISM: Artificial Sequence
 444 <220> FEATURE:
 445 <223> OTHER INFORMATION: Probe
 447 <400> SEQUENCE: 9

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<210> SEQ ID NO 24
<211> LENGTH: 19
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: :
<400> SEQUENCE: 24
tgccaccacca actgcttag

If 2137 Response is
Artificial, Pls

19

Explains the Source of
genetic material.

See pg- 7 for
Error explanation

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 02/13/2007
PATENT APPLICATION: US/10/642,272B TIME: 10:09:50

Input Set : F:\Sequence Listing (Substitute) (58777.12).txt
Output Set: N:\CRF4\02132007\J642272B.raw

Use of <220> Feature (NEW RULES):

Sequence(s) are missing the <220> Feature and associated headings.

Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence" or "Unknown". Please explain source of genetic material in <220> to <223> section (See "Federal Register," 6/01/98, Vol. 63, No. 104, pp.29631-32) (Sec.1.823 of new Rules)

Seq#:24

642272B.raw Error explanation

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/642,272B

DATE: 02/13/2007

TIME: 10:09:50

Input Set : F:\Sequence Listing (Substitute) (58777.12).txt
Output Set: N:\CRF4\02132007\J642272B.raw

L:622 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:24
L:624 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:24, <213>
ORGANISM:Artificial Sequence
L:624 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:24, <213>
ORGANISM:Artificial Sequence
L:624 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:24, Line#:624